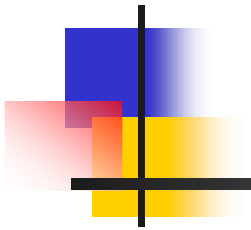
Opening Plenary Day 1 Session of the 2001 HIV Prevention Program Evaluation Meeting

Moderator Carl Hill, MPH

June 19, 2001

8:30 am – 9:30 am



Evaluation Guidance Update

June 19, 2001

We Have Received OMB Clearance!

- Evaluation activities in the Guidance are required under program announcement #99004
- Use revised "forms/variables"
- There are changes in race and ethnicity categories:
  - Hispanic or Latino
  - Not Hispanic or Latino
  - Ethnicity Unknown

Racial Categories

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- More than One Race
- Race Unknown

Revisions to Budget Tables and Membership Grid

- Tables of Estimated Expenditures (Budget Tables) are now "Tables of Allocations" that are due in April
- The Tables of Allocations should reflect how funds were allocated the previous year, including allocations for HIV infected persons
- Profile of Community Planning Group Members (Membership Grid) is due in September
- There are now primary and secondary categories for representation
- Table on HIV risk by ethnicity and race now covers categories beyond MSM

First Year Data from Health Departments (HDs)

- Evaluation Plans
  - 62 HDs (95%) submitted some type of plan
  - 1 – 150 pages in length
  - 8 were "plans to plan"
  - 24% discussed lack of evaluation resources
  - 47% discussed outcome monitoring
  - 32% discussed mechanisms for receiving client feedback

Intervention Plan (IP) Data

- 36 HDs (55%) submitted IP data
- 2 – 6 risk populations were targeted across the 36 HDs; average of 5 risk populations
- Average number of proposed intervention types was 6
- Across all 36 HDs, all of the risk populations were targeted and all intervention types employed
- MSM was the most targeted population, and outreach was the intervention type used most frequently with MSM
- Mother with/at risk for HIV was the least targeted population

Process Monitoring (PM) and Other Data Submissions

- 19 HDs (29%) submitted PM data
- 13 HDs submitted both IP and PM data
- 23 submitted only IP data while 6 submitted only PM data
- 24 HDs (37%) submitted neither IP nor PM data

Major Issues In Implementation of the Guidance

- Effects of varying levels of resources and evaluation capacity among HDs
- Differences between CDC's standard taxonomy for national data collection and local definitions
- Limitations regarding use of first year data

Lessons Learned from Year One

- Be Patient*
- Continue Stakeholder Involvement
- Strengthen Technical Assistance and Capacity Building Support

*But "raise the bar" each year: strive for high quality data

Status Report of Evaluation Guidance Data & Timetable of Evaluation Reporting and Analysis System (ERAS) Activities

Updated Evaluation Guidance

- Available at PERB homepage

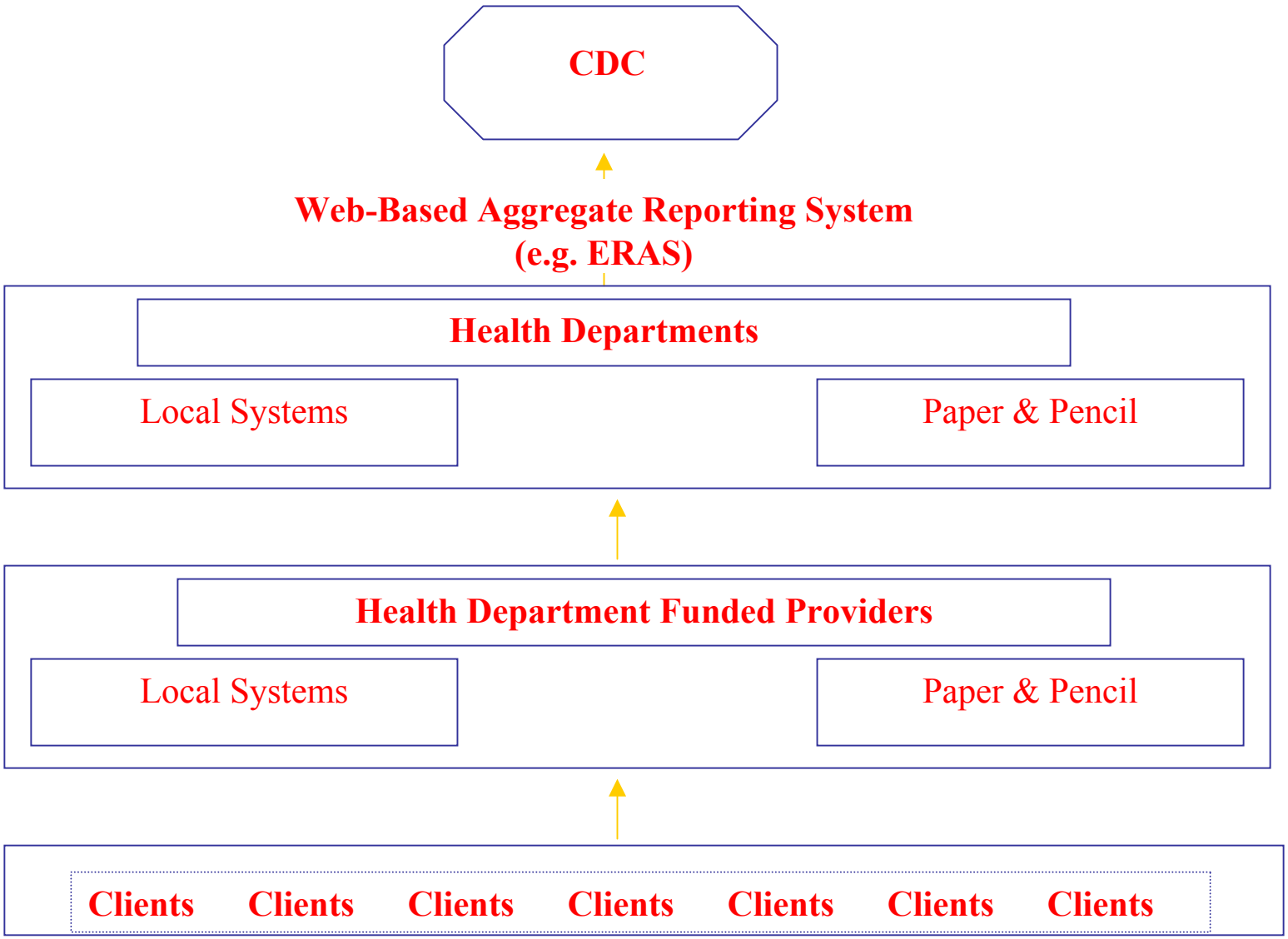
(www.cdc.gov/hiv/aboutdhap/perb/hdg.htm)

- Review with Adobe Acrobat Reader (Version 5.0)

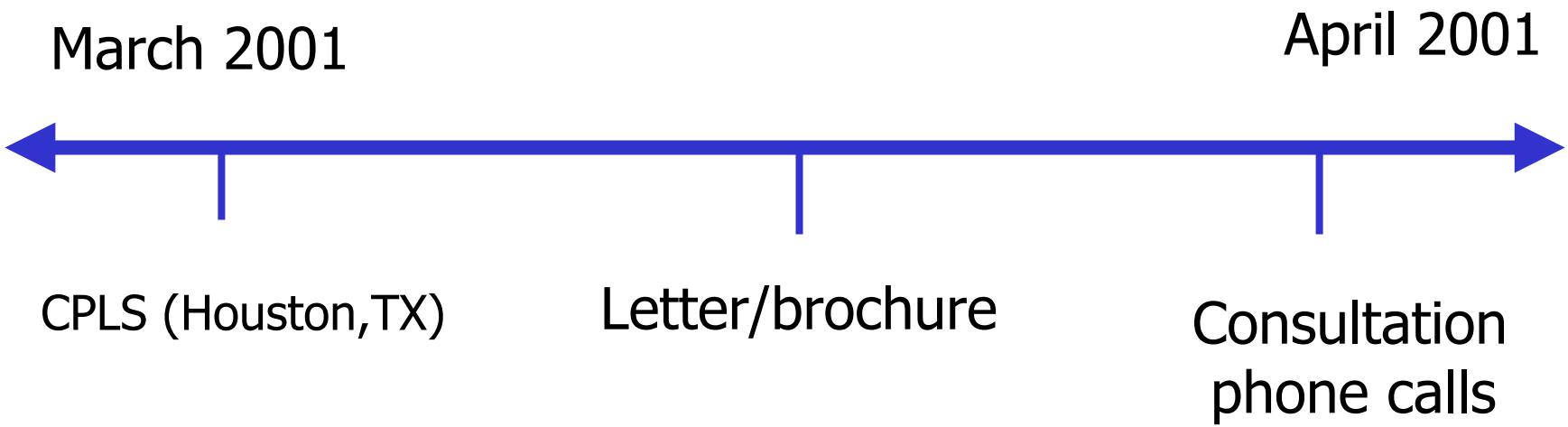
EG Data Management Update

- Timetable of ERAS activities
- Health Department software

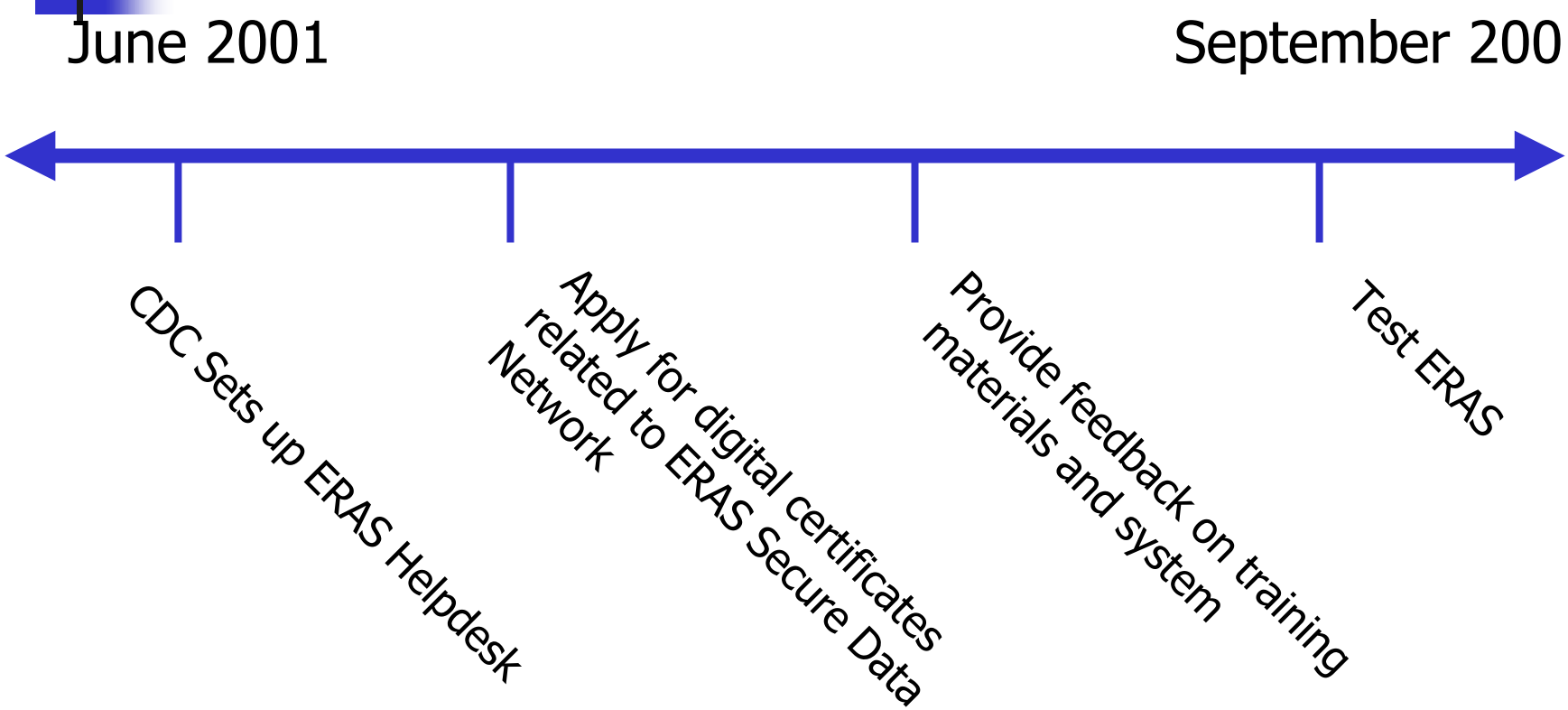
Flow Chart 1. Reporting Mechanisms for Health Department Evaluation Guidance Data



Timetable of ERAS Activities



Timetable of ERAS Activities (Pilot Sites)



Timetable of ERAS Activities (All Health Departments)

ERAS Helpdesk operational

Apply for digital certificates to access ERAS

Release system for evaluation data submission

-Data submitted via ERAS or hard copies sent to CDC
-Data can be viewed on-line
-Obtain reports/analysis on-line

2 roundtable sessions at Swap Meet

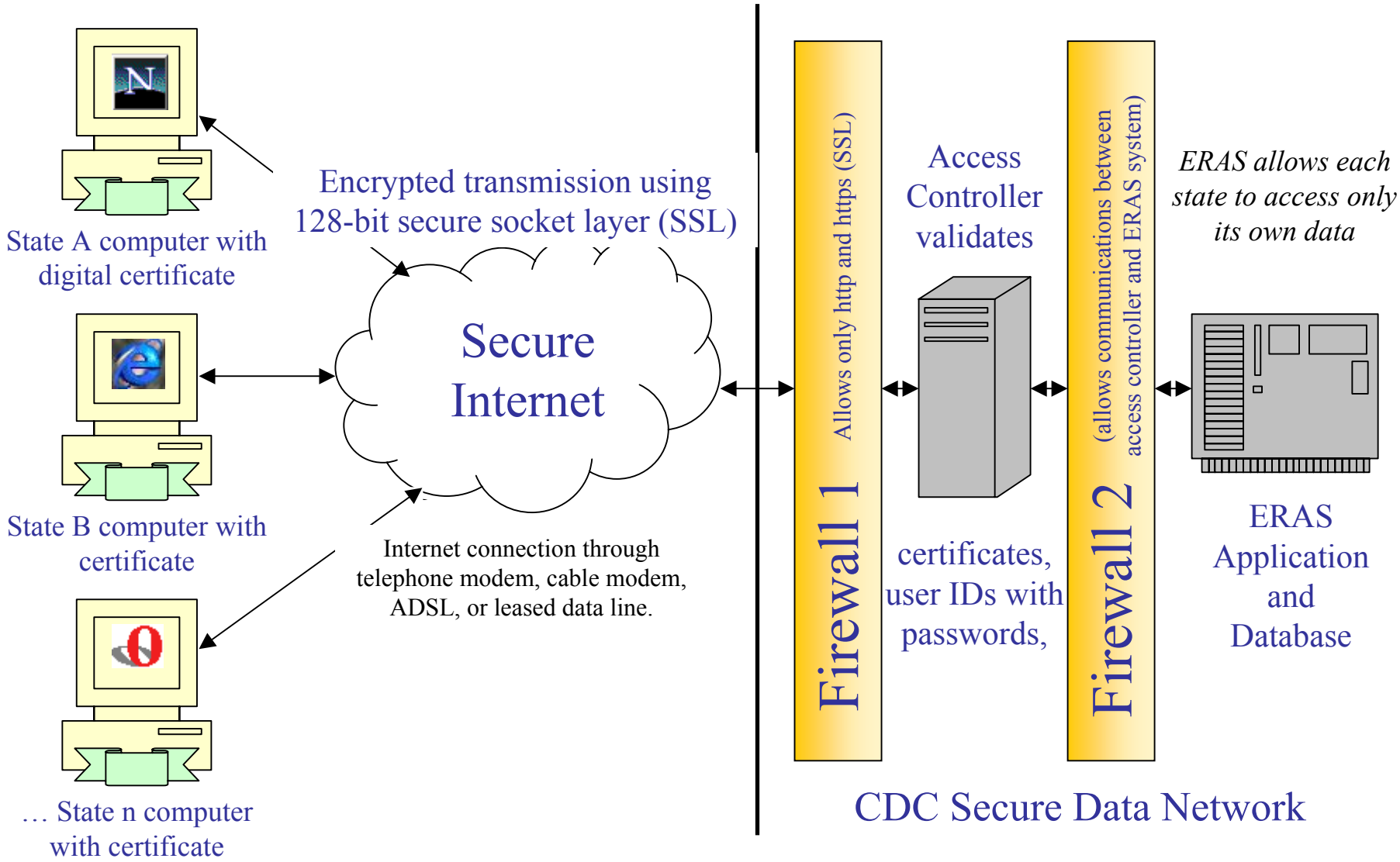
Tuesday, June 19 (3:30pm – 5:30pm)

- ERAS live demo
- ERAS questions and answer session

Evaluation Reporting and Analysis System

- Background and context
  - National Electronic Disease Surveillance System
  - www.cdc.gov/od/hissb/docs.htm
- Rationale for web-based design, and system requirements
- Preview of system layout
- Swap meet: 3:30 Montreal Room
  - Questions and system demo

Design of the Evaluation Reporting and Analysis System (ERAS)



ERAS Design Features

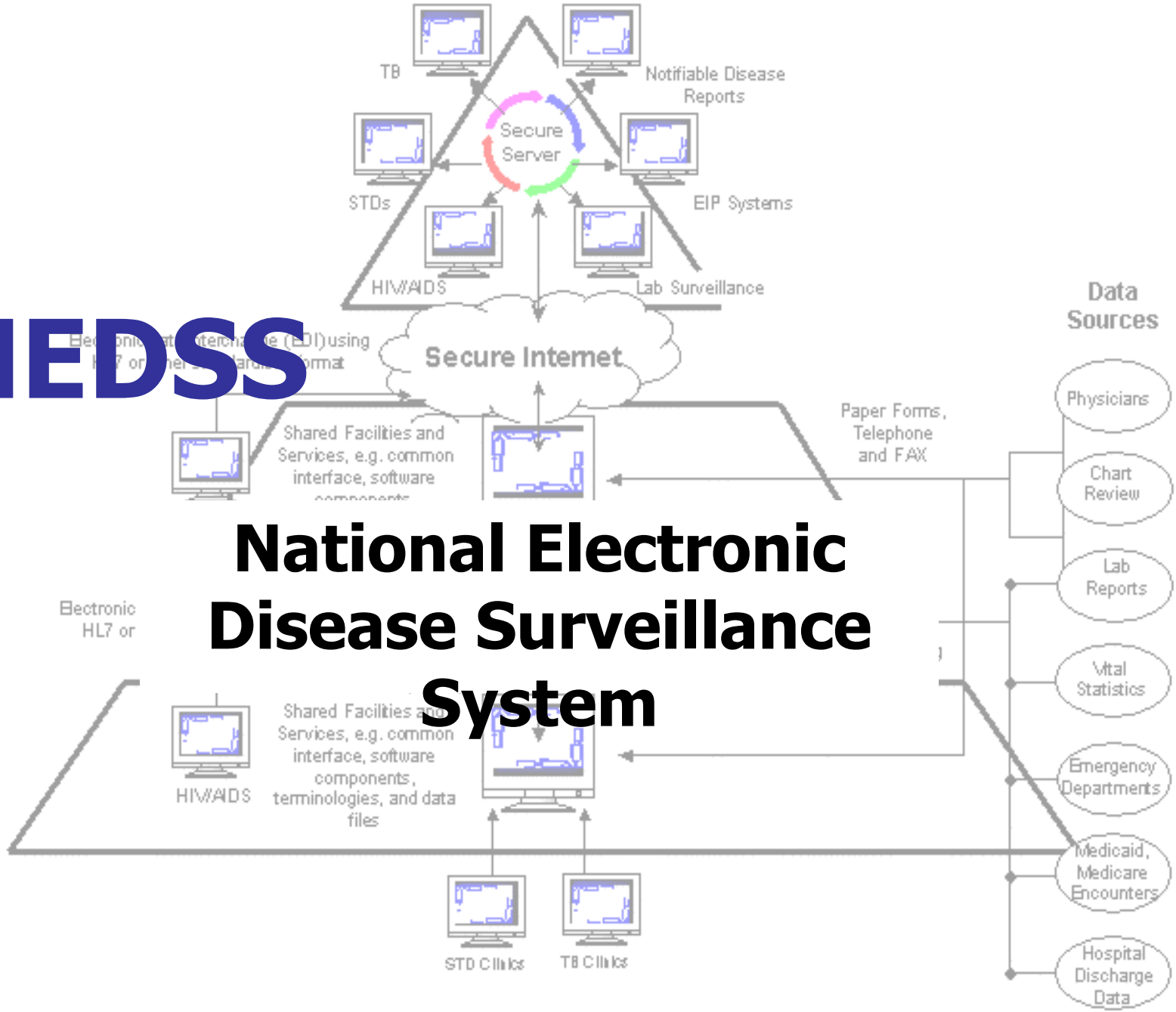
- Single copy of the application and a single database
- System is housed behind CDC firewall
- Access to system is authorized by digital certificates
- Data transmissions protected by encryption
- Data are validated as they're entered

ERAS Design Features

- Each state can access only their data
- Browser is a familiar user interface for most staff – staff training is reduced
- No need for CDC to distribute software to states
- No need for states to install software or updates
- System components at states (i.e. browser) is already familiar to state support staff
- States can access system from any machine with an Internet connection

NEDSS

National Electronic Disease Surveillance System



What Is NEDSS?

NEDSS is a set of shared standards – including data definitions, facilities, services and software -- to be used across the public health enterprise.

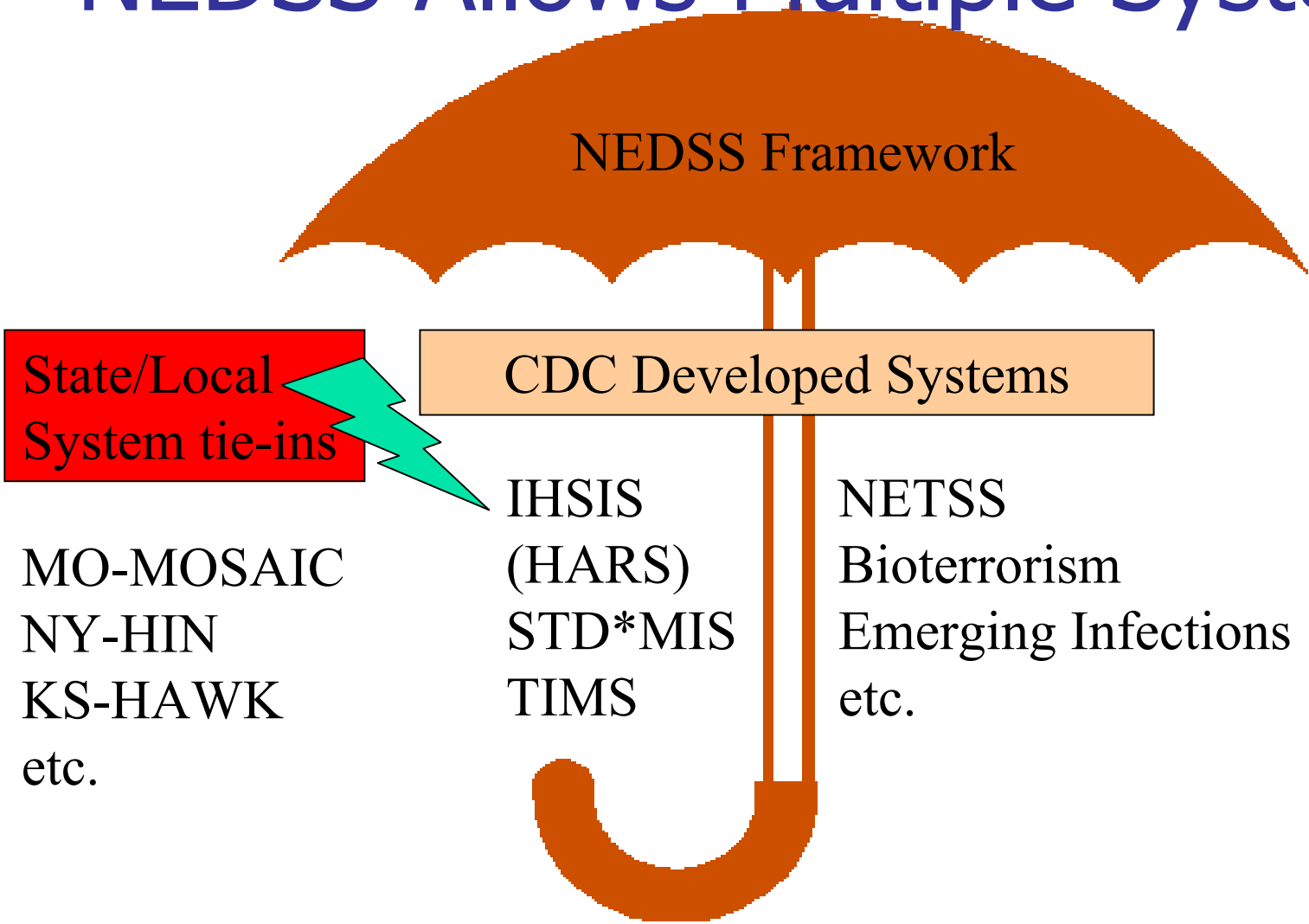
The Vision

An electronic information system that automatically gathers health-related data from a myriad of sources on a 'real-time' basis, facilitating our ability to monitor the health of communities, perform ongoing analyses of trends, detect emerging public health problems, and use information for taking action or setting public health policy.

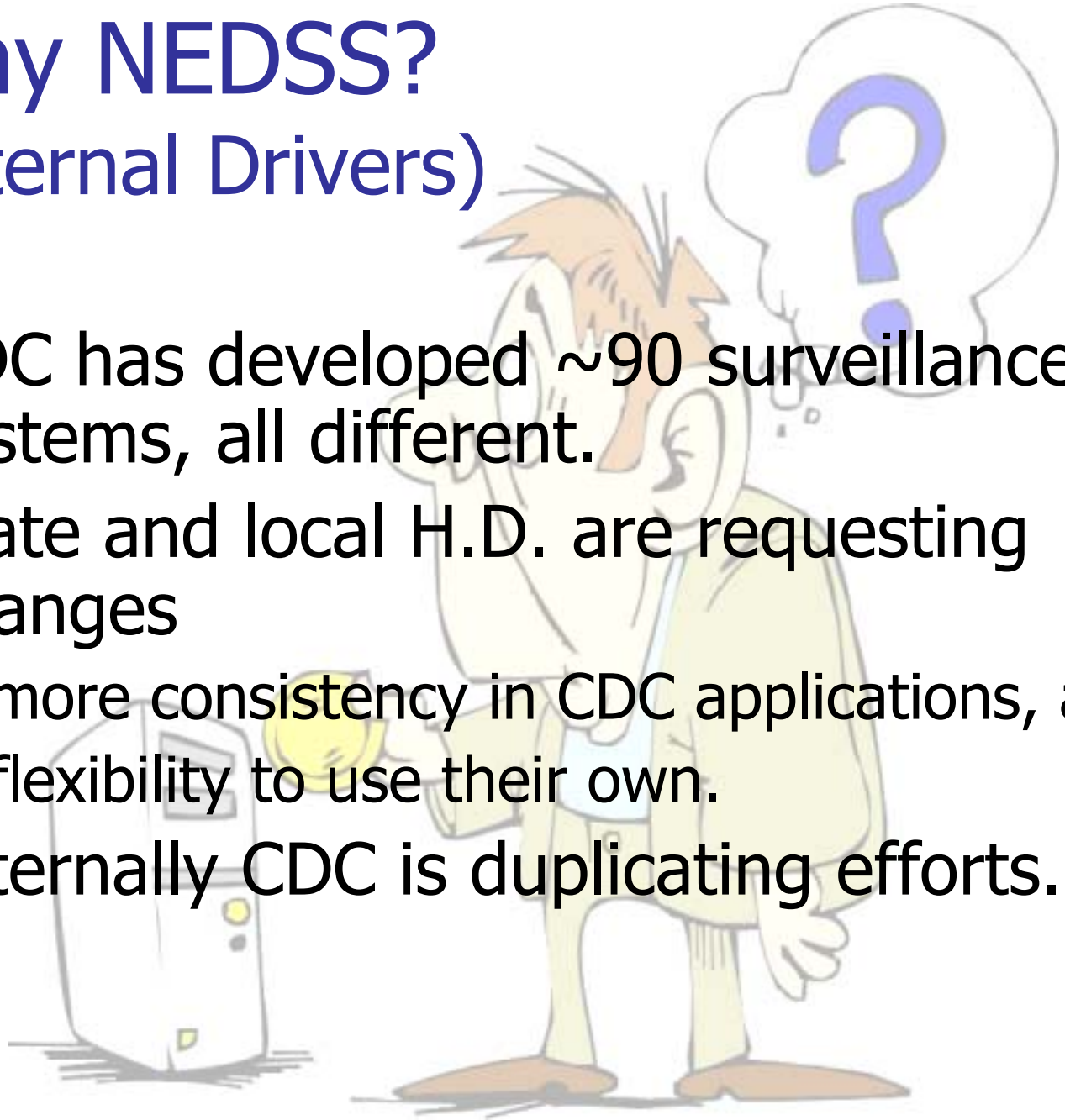
What NEDSS Is Not

NEDSS is not a single system but rather allows multiple systems to cooperate with one another.

NEDSS Allows Multiple Systems



Why NEDSS?
(Internal Drivers)



- CDC has developed ~90 surveillance systems, all different.
- State and local H.D. are requesting changes
  - more consistency in CDC applications, and
  - flexibility to use their own.
- Internally CDC is duplicating efforts.

Current Situation

CDC

Program Specific Reports and Summaries

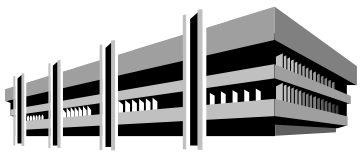
MMWR Weekly Tables

MMWR Annual Summaries

HARS | STD*MIS | TIMS | NNDSS | EIP Systems | PHLIS

Statistical Surveys for Chronic Diseases, Injuries and Other Public Health Problems

Varied communications methods and security - specific to each system - including diskettes, e-mail, direct modem lines, etc.



State Health Department

HARS | STD*MIS | TIMS | NETSS | EIP Systems | PHLIS

Reporting by Paper Form, Telephone and Fax

Data Sources

- Physicians
- Chart Review
- Lab Reports

Varied communications methods and security - specific to each system- including paper forms, diskettes, e-mail, direct modem lines, etc.

City/County Health Department

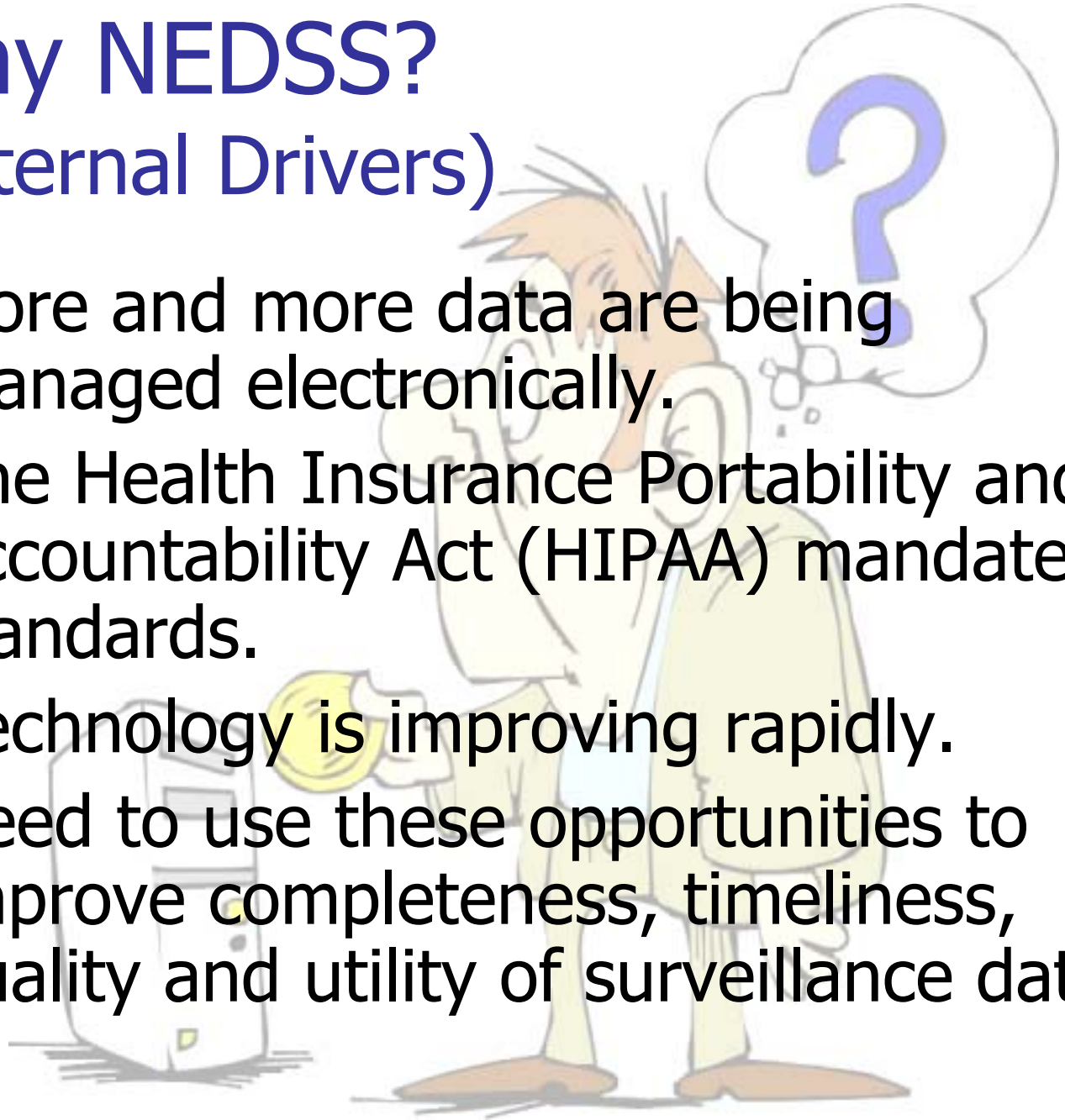
HARS | STD*MIS | TIMS | NETSS | EIP Systems* | PHLIS

STD*MIS (Optional at the Clinic)

TIMS (Optional at the Clinic)

*EIP Systems (ABC, UD, Foodnet)

Why NEDSS?
(External Drivers)



- More and more data are being managed electronically.
- The Health Insurance Portability and Accountability Act (HIPAA) mandates standards.
- Technology is improving rapidly.
- Need to use these opportunities to improve completeness, timeliness, quality and utility of surveillance data.

Proposed Integrated Surveillance Systems Solution

CDC

TB

Notifiable Disease Reports

Secure Server

STDs

EIP Systems

HIV/AIDS

Lab Surveillance

Electronic data interchange (EDI) using HL7 or other standardized format

Secure Internet

Data Sources

Physicians

Chart Review

Lab Reports

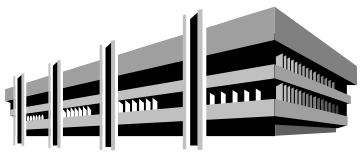
Vital Statistics

Emergency Departments

Medicaid, Medicare Encounters

Hospital Discharge Data

Paper Forms, Telephone and FAX



State Health Department

HIV/AIDS

Shared Facilities and Services, e.g. common interface, software components, terminologies and data files

Electronic data interchange (EDI) using HL7 or other standardized format

Secure Internet

Secure electronic reporting

City/County Health Department

HIV/AIDS

Shared Facilities and Services, e.g. common interface, software components, terminologies, and data files

STD Clinics

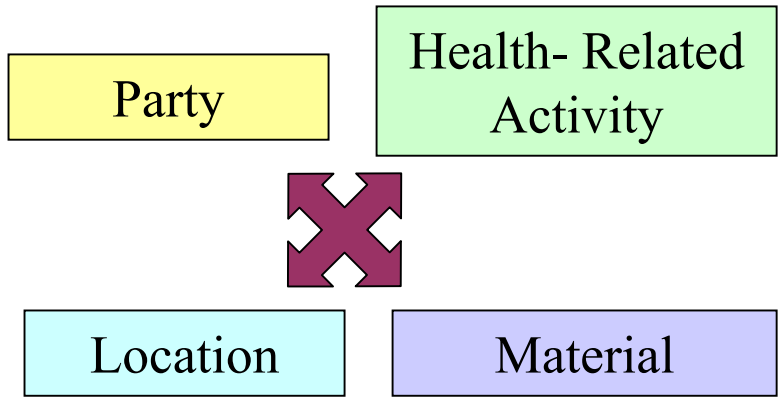
TB Clinics

Key Areas for NEDSS Standards

- Data
- User Interface
- System Architecture

NEDSS Data Architecture

- Public Health Conceptual Data Model (PHCDM)



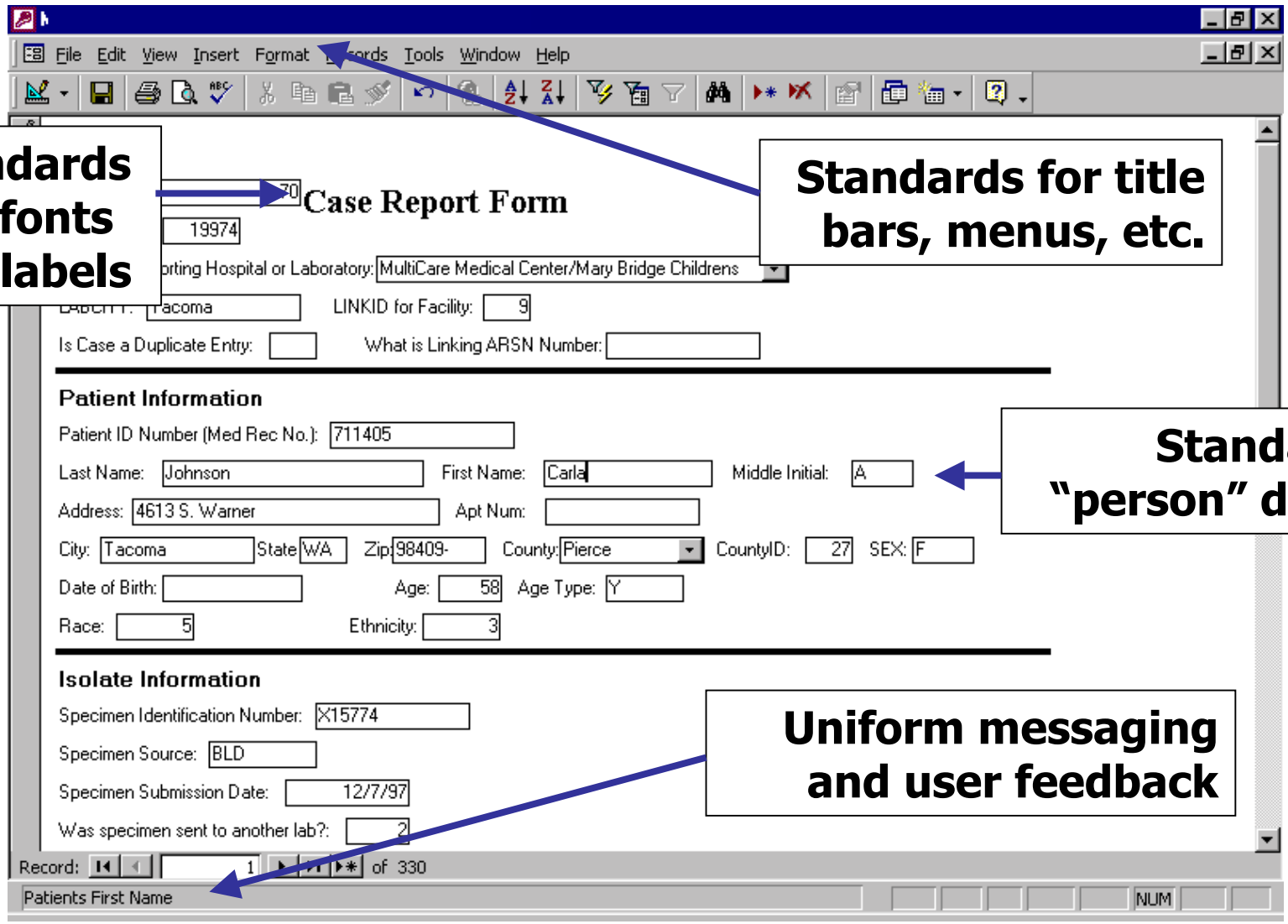
- CIPHER Data Standards

Yes=Y, No=N

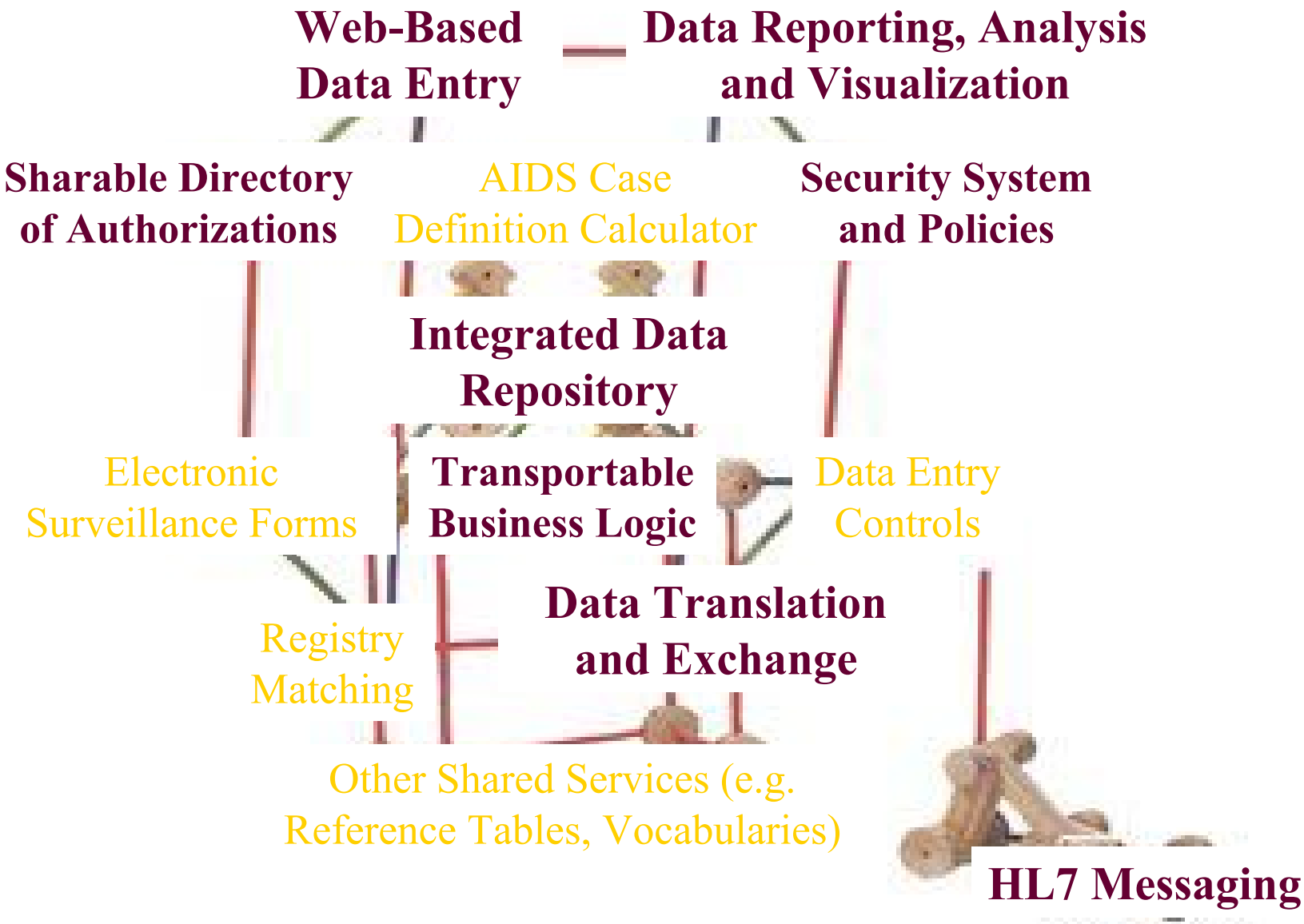
- Core Demographic Data

Current Name+Aliases,
Current Address+Others,
Sex, Race, etc.

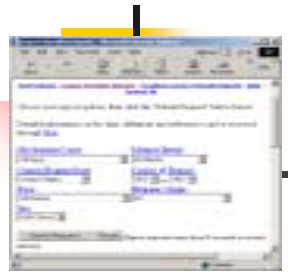
Standard User Interface



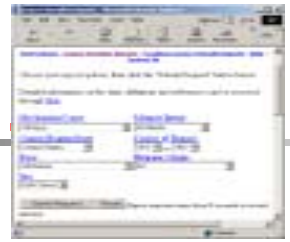
NEDSS Architecture Elements and Services



NEDSS System Components



Local Health Department Or Clinical Site



State Health Department

Reporting, GIS and Analysis

B L

B L

B L

Electronic Laboratory Messages

Clinical Database

HL7

B L

XML Data Exchange

Integrated State / Local Data Repository

Security

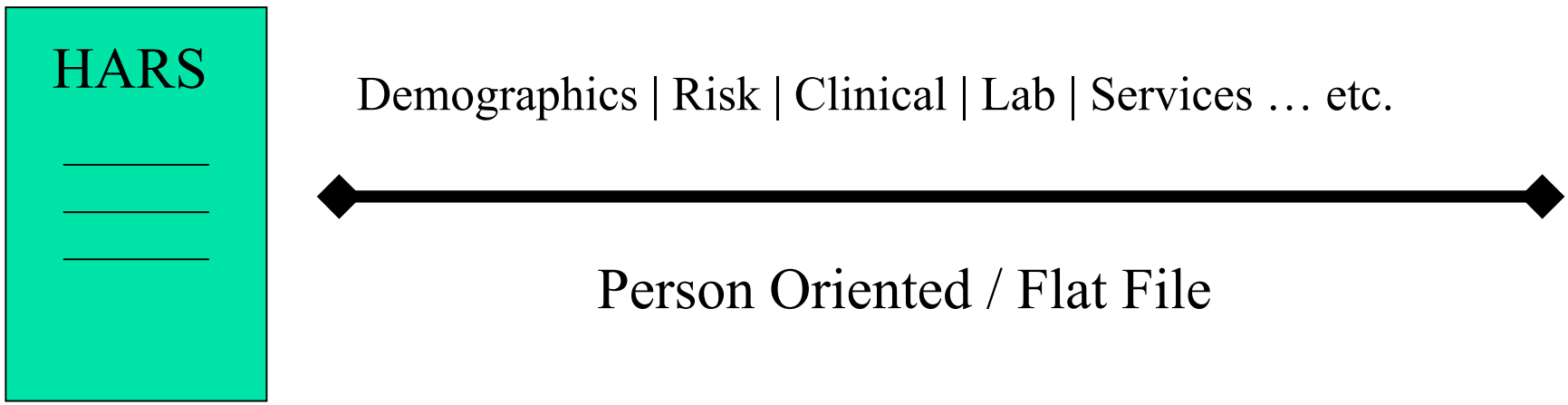
Shareable Directory of PH Personnel

CDC and Other Health Depts.

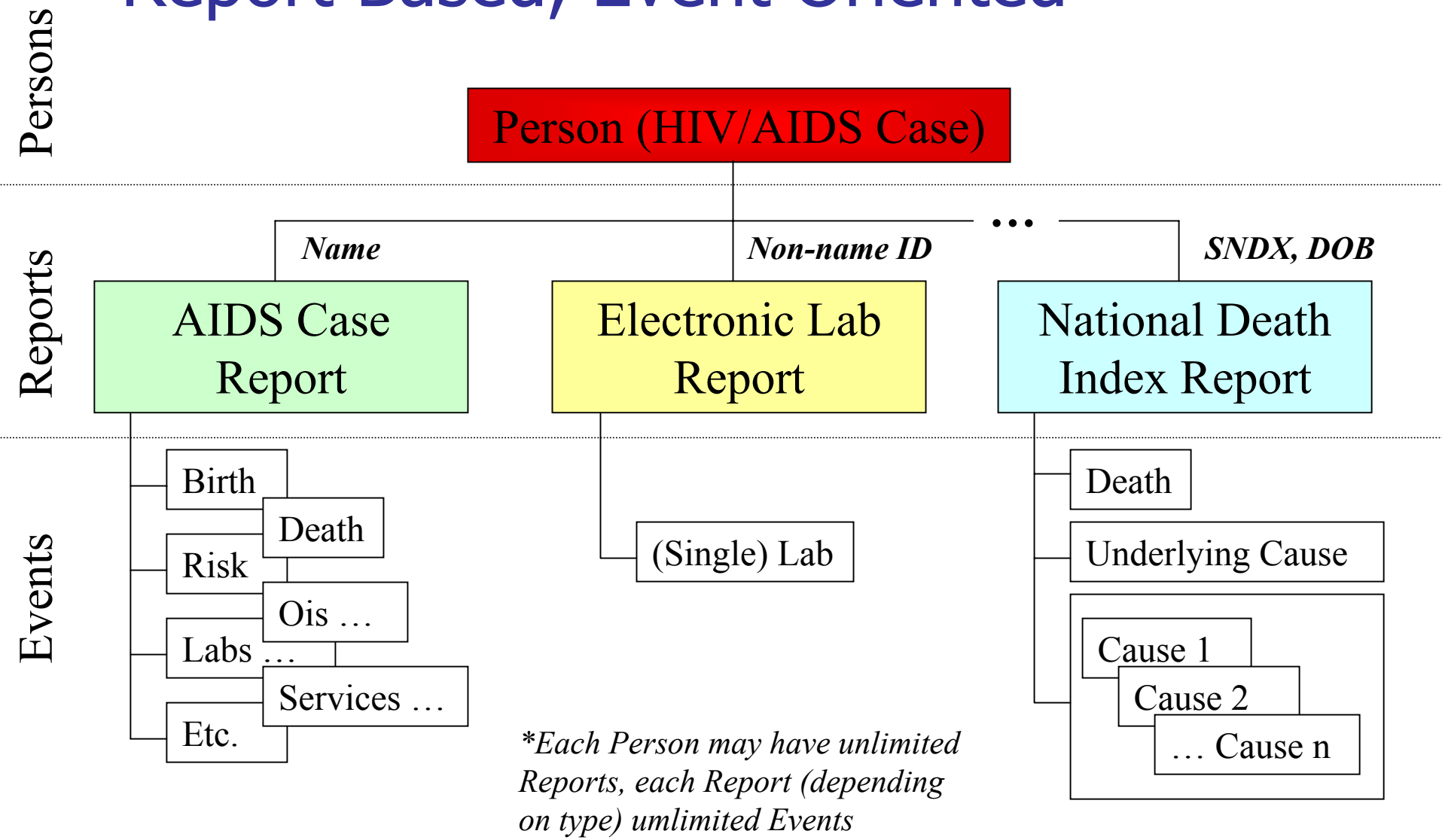
Develop transportable business logic capability (COM, CORBA, EJB).

Data Architecture

Old



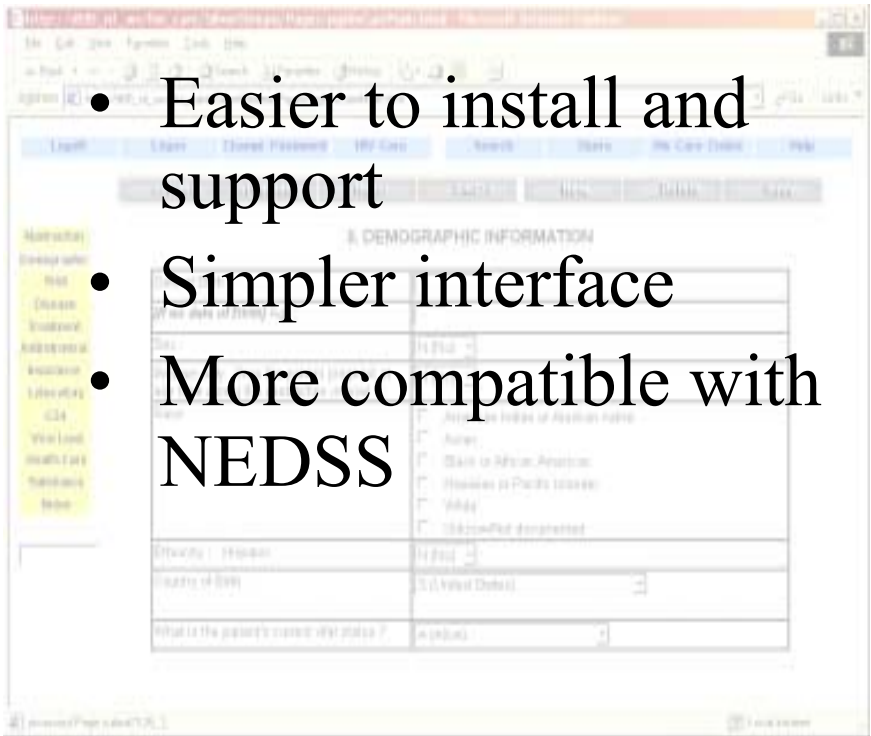
IHSIS Data Format
Report Based, Event Oriented*



*Each Person may have unlimited Reports, each Report (depending on type) umlimited Events

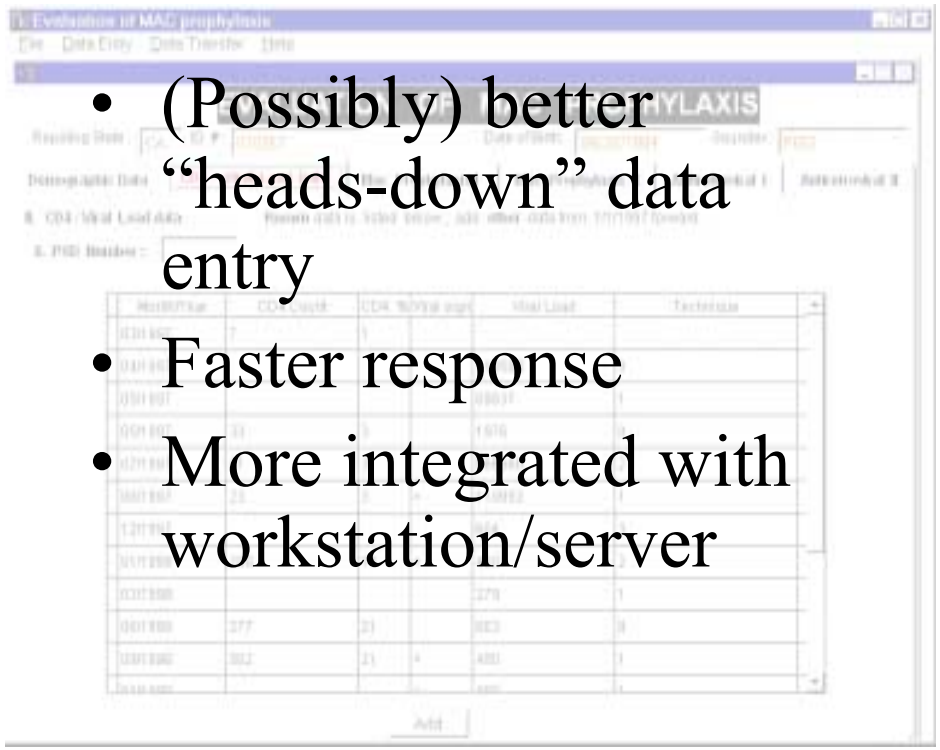
User Interface
-- To Browse or Not To Browse --

Browser



- Easier to install and support
- Simpler interface
- More compatible with NEDSS

Non-Browser

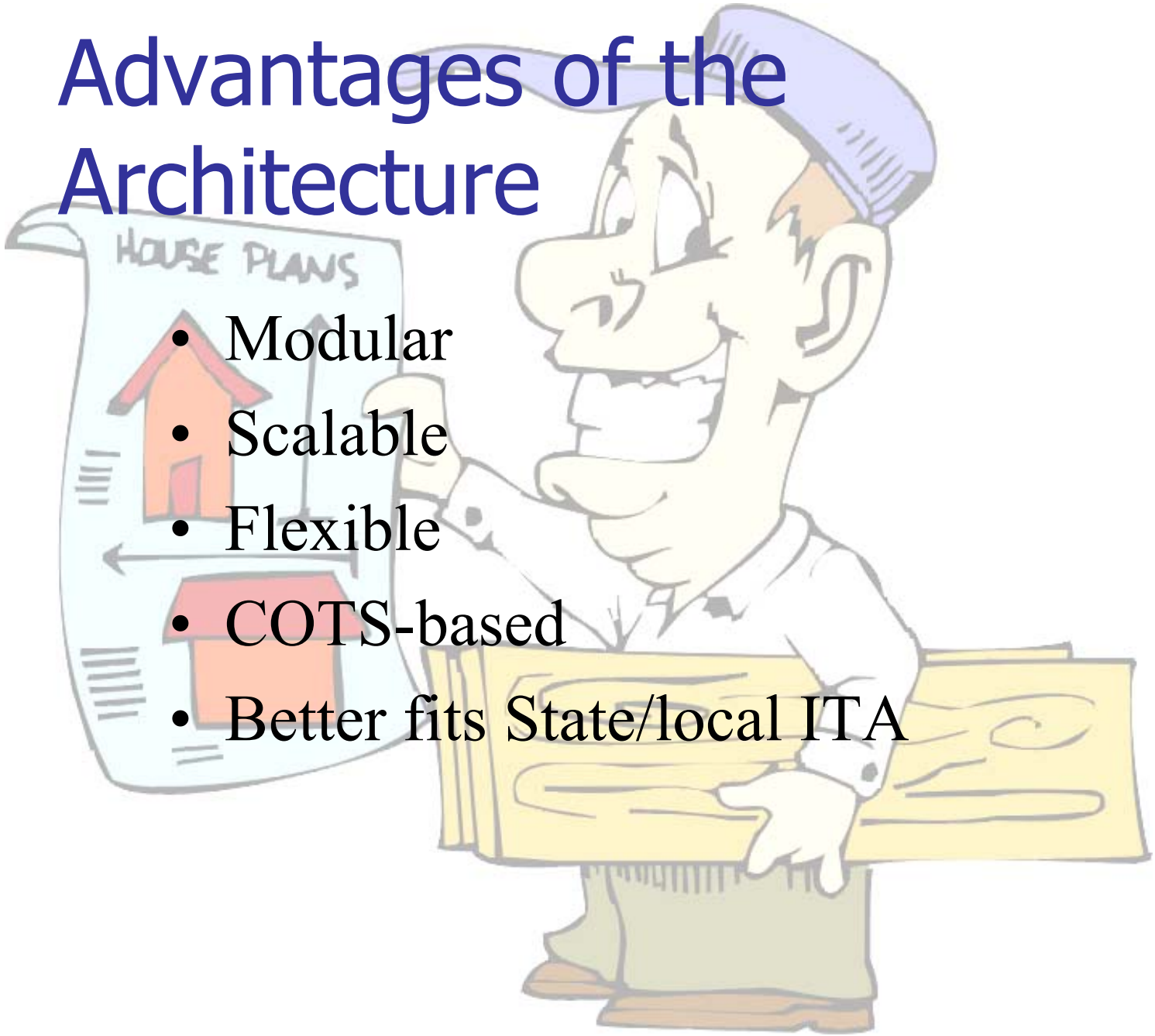


- (Possibly) better "heads-down" data entry
- Faster response
- More integrated with workstation/server

IHSIS Application Architecture

- Microsoft (or other) SQL Server
  - NEDSS Core Demographic Data
- Java Web Application
  - Silverstream Application Server
- Eclipsys eLink for EDI
- SAS for Data Analysis and Reporting

Advantages of the Architecture



- Modular
- Scalable
- Flexible
- COTS-based
- Better fits State/local ITA

Security and Confidentiality

- NEDSS will raise the bar for most all CDC-developed systems.
- Integrated data repository does not necessarily mean a shared database.
- Web technology is not the same thing as the public Internet.
- Health departments must still deploy IHSIS in ways that assure appropriate uses of data.